to better understand a patient's journey living with the disease and identify unmet needs. **Methods:** The research consists of a mix of structured interviews, digital ethnography and patient records. A total of 10 Canadian patients living with CIDP and their caregivers, 7 Canadian neurologists and 3 Canadian neuroscience nurses will be the subjects for our research. **Results:** In order to identify key interactions between patients and the healthcare system, the report will map a patient's experience on 4 distinct planes. Clinical journey (ex: first symptoms, diagnosis, disease progression), Patient emotional journey (the emotional states the patient undergoes throughout his/her journey), Caregiver emotional journey, and Outcomes (ex: delays in care, damaged relationships, commitment to therapy). The report will identify key areas along the patient journey where more intervention is possible and where more research may be needed. **Conclusions:** The research is expected to be completed by April 2019.

P.031

Intravenous immunoglobulins (IVIG) therapy in chronic inflammatory demyelinating polyneuropathy (CIDP): time to maximal recovery

*A Opala (Hamilton) S Baker (Hamilton)**

doi: 10.1017/cjn.2019.131

Background: The response of Chronic Inflammatory Demyelinating Polyneuropathy (CIDP) to Intravenous Immunoglobulins (IVIG) treatment is well established . However, determination if patients not responding to 2 IVIG treatments or those whose condition stabilizes (ICE Trial) may benefit from additional doses remains unclear. We aim to identify time period required to reach maximal strength gains from IVIG treatment. **Methods:** Retrospective chart review of 14 patients with CIDP was performed. Change in Grip strength (GS), Knee extension (KE), Elbow Flexion (EF) and Dorsflexion(DF) was analyzed with a dynamometer during IVIG therapy. Averages for : percent change from baseline(Max%Δ),cumulative grams(g) of IVIG and time in weeks(w) required for maximal strength recovery was determined per function (+/-SEM).Anciliary therapy for all patients was recorded. **Results:** Strongest improvement was observed for DF(124+/-30%,$p<0.001$), followed by KE(113+/-19%,$p<0.01$),GS(100+/-21%,$p<0.001$) and EF(98+/-14%$p<0.05$).GS improved the fastest(19.1+/-3w) followed by DF(29.5+/-7w),KE(29.6+/-4w) and EF(31+/-6w). Cumulative IVIG dose to reach Max%Δ was highest for EF(869+/-201g) and lowest for GS(573+/-78g). **Conclusions:** Our study has demonstrated effectiveness of multiple treatments with IVIG to reach significant improvement in strength. Different muscle groups manifested different time-dependency ,reflecting variable amounts of IVIG required. Improvement was identified to be present on a ongoing basis ,with therapy lasting between 19.1-31 weeks,requiring between 869-573g of IVIG.

Neuroscience Education

P.032

What do elective students learn about the specialty of Neurology (and what can that teach us)?

*F Moore (Montreal)**

doi: 10.1017/cjn.2019.132

Background: "Neurophobia" describes a fear of Neurology on the part of medical students. This contrasts with the "neurophilia" that exists in society with increasing awareness of disorders such as stroke and multiple sclerosis. Ideally, we should take advantage of "neurophilia" to promote our specialty's strengths. One step would be to better understand what students learn from a Neurology elective. **Methods:** This was a qualitative study. Students completing an elective between September 2011 and March 2015 at the Jewish General Hospital (JGH) in Montreal completed written pre- and post-elective questionnaires. **Results:** 36 students participated; 15 from McGill, 11 from other Canadian medical schools, and 10 from International medical schools. Many students changed their opinion about Neurology, with fewer citing lack of treatments or poor patient prognoses as negatives after completing their elective. They valued knowledge acquired about the neurological exam and problem-solving, while the range of cases and subspecialties surprised them. Many would diversify the setting of their elective to better experience this variety. **Conclusions:** More diversified elective experiences could showcase the strengths of our specialty and the scope of neurological practice. Presenting Neurology as a challenging, intellectually stimulating specialty that emphasizes problem solving could increase student interest.

Neurovascular, Stroke and Neurointerventional

P.033

Awareness and knowledge of stroke and heart disease:a follow-up study of the Chinese-Canadian cardiovascular health project

JY Chu (Toronto) C Chow (Toronto) GW Moe (Toronto) A Yan (Toronto) JV Tu (Toronto) C Lee (Dublin)*

doi: 10.1017/cjn.2019.133

Background: This is an updated on-line survey of the awareness and knowledge of stroke and heart disease amongst Chinese-Canadians carried out in 2017. **Methods:** 1001 randomnly selected Chinese-Canadians from Toronto and Vancouver area. **Results:** 46% were > 45 years old and male to female ratio was: 49.3 : 50.8, with native language being Cantonese in 40%, Mandarin 24% and 31% English. 82% were Canadian citizens and 31% had been in Canada < 10 years. 44% were from Mainland China, 37% Hong Kong , 6% Taiwan and 12% were borned in Canada. 85% were able to name at least one symptom of heart attack ($p=0.005$) while 80% were able to name at least one symptom of stroke ($p=0.0008$). 85% would call 911 in response to symptoms of heart attack or stroke compared to only

20% in a previous 2004 telephone survey (p=0.00001) . **Conclusions:** There is a dramatic improvement in the awareness and knowledge of stroke and heart disease amongst Chinese-Canadians compared to a previous telephone survey in 2004. This significant change could be due to difference in survey technique, but these improvements could also be due to the ongoing health promotion efforts by the Chinese-Canadian Council in support of the Heart & Stroke Foundation.

P.034

Evaluation of modeling software for deployment of Pipeline stents in the endovascular treatment of intracranial aneurysms

F Teoderascu (Edmonton) J Rempel (Edmonton) C O'Kelly (Edmonton)*

doi: 10.1017/cjn.2019.134

Background: Flow diversion is an established endovascular method for the treatment of intracranial aneurysms. The Pipeline Embolization Device (PED) remains the only FDA-approved stent available in USA and Canada since 2011. Stent position plays an important role in determining long-term success. The Leonardo Workstation(Siemens) is used for planning the ideal stent size and post-deployment destination. This first-ever study evaluates the accuracy of modeling software in predicting PED location post-deployment. **Methods:** 48 PED-assisted cases were performed 2012-2018 at the University of Alberta Hospital. 20 fit our preliminary inclusion criteria (single stents, simple anatomy). The proximal and distal landing zones were used to model the ideal stent using Leonardo. Accuracy was measured by comparing the Leonardo-predicted stent length vs known length. Results modeling against the dimensions predicted by AngioSuite, an app-based interface designed for use in the planning stages. **Results:** Leonardo workstation is accurate within 5mm at predicting final length for stents oversized by ≥0.25 cm. The predicted difference by Leonardo workstation & AngioSuite did not demonstrate statistical significance (P=0.36, P=0.24 respectively). **Conclusions:** Current angiographic planning tools are accurate at predicting PED deployment within 5mm. Complex vascular anatomy and deployment of multiple stents make prediction challenging. Analysis of these complex cases is currently underway.

P.035

Impact of a telestroke system on acute ischemic stroke patient outcomes and thrombolysis rates

SL Rasmussen (Saint John) D Canales (Saint John) D Blacquiere (Ottawa)*

doi: 10.1017/cjn.2019.135

Background: Telestroke can improve ischemic stroke patient outcomes by improving access to physicians specialized in stroke care and increasing the rate of thrombolysis. The aim of this study to assess the effect of the newly implemented Telestroke service on ischemic stroke patient outcomes in New Brunswick, Canada, a province with a high rural population. **Methods:** By means of a retrospective chart review, data for 366 adult acute ischemic stroke patients (Telestroke = 15.3%; non-Telestroke = 84.7%) were collected from emergency departmentsspanning five sites in the province. Outcomes included home discharge rates, complications (i.e., hemorrhage,angioedema), mortality, rate of thrombolysis and time to treatment. **Results:** No significant differences emerged for home discharge rates, complications, mortality or door-to-needle time. Telestroke patients had a significantly greater rate of thrombolysis treatment (51.8% vs 6.1%) and significantly less door-to-CT time (*M*= 27.63 min vs *M*= 100.78 min) compared to the non-Telestroke group. **Conclusions:** Overall, both groups had similar outcomes with some trends toward improvements for patients utilizing Telestroke.

P.036

Stroke in people with Down Syndrome: a retrospective study

C Cieuta-Walti (PARIS) C Mircher (PARIS) I Marey (PARIS) J Toulas (PARIS) H Walti (PARIS) M Conte (PARIS) A Rebillat (PARIS) A Ravel (PARIS)*

doi: 10.1017/cjn.2019.136

Background: There are only few studies approaching the prevalence and cause of stroke in children and adults with Down Syndrome (DS). **Methods:** We did a retrospective study of our cohort of 4962 patients of Jerome Lejeune Institute since 2007. We collected age of stroke, clinical presentation, cause (TOAST classification), treatment and clinical course. **Results:** We identified 20 patients from 6 to 56 years old .In all cases, it was a stroke of ischemic origin.: 8 children with a prevalence of 0.33%. 4 had a cardio-embolic origin, 3 secondary to Moya-Moya syndrome and one of undetermined origin. 12 adults (21 to 52 years old) with a prevalence of 0.46%.The majority of the causes of these ischemic strokes are indeterminate (9 of 12), **Conclusions:** We found a low prevalence and an ischemic cause in all cases of stroke, which differs from the general population. For pediatric stroke, the causes are expected thromboembolic in a context of heart disease most often or secondary to a Moya-Moya syndrome. For adult strokes, the average age is younger than that in the general population and the cause is indeterminate in most cases. We must better explore our patients to identify the risk factors in DS population.

P.037

Keeping track of time: emphasizing symptom onset-to-hospital time in stroke care

DE Freedman (Hamilton) N Behih (Hamilton) A Elmeligi (Hamilton) D Sahlas (Hamilton)*

doi: 10.1017/cjn.2019.137

Background: The Canadian Stroke Best Practice Recommendations target a median door-to-needle time of 30 minutes. However, brain tissue becomes damaged with any delay from symptom onset. Efficiencies may be gained prior to hospital arrival, by evaluating the timeliness of patient access to hospital from symptom onset, as well as by improving healthcare provider communication, prior to arrival of the patient. **Methods:** We engaged with hospital administration, paramedic services, allied health colleagues, physicians, and engineers, to develop Kairos, a secure online platform that healthcare providers can utilize to track progress en route to hospital, as well as to share pertinent stroke patient information, prior to arrival. **Results:** Kairos is built on React Native, allowing users to access it on android or iOS devices. Paramedics select patient identification, symptom